

ENVIRO FLASH

Subject: The Environmental Side of Silica Dust at Construction Sites

Reference CORE Safety Group's [Silica Compliance Flowchart](#) for workplace safety guidance

Hazards of crystalline silica



Activities like cutting, grinding and drilling generate respirable dust containing crystalline silica.



Unprotected site workers and offsite pedestrians who inhale crystalline silica particles are at increased risk of serious, potentially fatal, lung and kidney diseases.

Environmental regulation of crystalline silica at construction sites

Airborne silica dust is generally addressed under construction site requirements to minimize nuisance dust. State stormwater permits and local ordinances typically require use of dust control methods. **Common practice is to use wet-cutting methods or dust collection systems.**

Discharge of untreated silica dust slurries from mixing and wet-cutting operations into storm drains or offsite waterbodies is prohibited by state NPDES permits and local ordinances. **Slurry runoff can be controlled through the use of common stormwater BMPs like wattles, gravel berms and inlet protection devices.**

Silica dust collected from dry-cutting concrete can typically be disposed of with normal construction waste.

Dust and residue generated during abrasive blasting activities may contain heavy metals and other toxic materials. **Verify requirements before engaging in any activities that may generate dust contaminated with hazardous substances.**

Crystalline silica is one of the most common minerals found in the earth's crust.

Many common building materials contain silica:



Sand



Stone



Cement/
Concrete



Mortar

